

CLAIMS:

Claims 1-15 (previously canceled).

16. (previously presented) A method for providing comprehensive fire prevention and suppression in an aircraft having an engine, a fuel tank containing fuel and a human occupied compartment, by producing oxygen-depleted air from a bleed air received from said engine, said method comprising:

separating said bleed air into an oxygen-enriched gas mixture and an oxygen-depleted gas mixture;

removing said oxygen-enriched gas mixture by discharging it outside the aircraft;

supplying said oxygen-depleted gas mixture into said fuel tanks for establishing therein a fuel ignition suppression environment in order to prevent ignition of said fuel in said fuel tanks; maintaining the oxygen content in said fuel ignition suppression environment in the range from greater than 9% to approximately 16% of oxygen;

17. (previously presented) The method of claim 16, wherein the aircraft further comprises a cargo compartment, and the method further comprises the step of:

supplying said oxygen depleted gas mixture into said cargo compartment;

establishing a hypoxic environment in said cargo compartment, wherein said hypoxic environment in said cargo compartment contains oxygen in the range from greater than 9% to approximately 16% by volume; and

maintaining said hypoxic environment in said cargo compartment.

18. (previously presented) The method of claim 16, wherein in case of an emergency,

supplying said oxygen

enriched gas mixture, via respiratory masks, to passengers and crew in said aircraft;

automatically deploying this supply when a signal from smoke and fire detection system received or a depressurization of the cabin being detected.